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Telephone: [redacted]

27 March 1978

OLC RECORD COPY

TO: Mr. Richard Giza
Permanent Select Committee on
Intelligence

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78-1184/A

HPSCI

Dear Dick:

I am forwarding a four page paper explaining the CRAFT and COMET systems. It is my understanding that you requested this explanation and I hope you will find it useful.

Sincerely,

25X1 [redacted]

Assistant Legislative Counsel

25X1 [redacted]

Enclosure
As stated

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The Agency has a worldwide electrical communications network that provides the Operations Directorate with paper copies of messages. Typed messages delivered for transmission at Headquarters or at an overseas installation are converted into electrical form, encrypted, and transmitted electronically. When the electronic message is received, it is printed and delivered to addressees in paper form in addition to being available in electrical form. The Operations Directorate is capturing these messages while they are still in electrical form and is planning to use this store of electrical messages as the foundation for instituting a "paperless file" information system.

The present procedure used for handling paper copies of messages is as follows. Once the paper message is received in the Operations Directorate, a copy is sent to the DO's central information system to be manually processed and stored, along with copies of other types of correspondence, for future reference and retrieval. The paper information collection in the DO is maintained similarly to the way a library catalog manages its book collection in that information about each message is manually extracted and converted back into electrical form through a typing process with the resulting abstract stored as a reference to the message.

As can be seen from the above, the communication and information systems duplicate each other in that they both produce copies of messages in paper and electrical form to meet their respective responsibilities. This duplication can be eliminated by coordinating the message handling and information storage and retrieval processes so that messages are prepared in a form acceptable to the needs of both systems. Current technology provides the method and encouragement to integrate the procedures governing preparation, dissemination, storage and retrieval of messages. Toward this end we believe it is essential to develop systems that would function in the following envisaged concept of operations:

> Messages would be prepared by secretarial personnel (or composed by senior personnel) at overseas or Headquarters locations using a typewriter-like computer terminal with an attached TV screen (CRT). The secretary would type the message as is done today; but at the same time, the computer terminal would automatically store the message in electrical form. The terminal's TV screen, which displays each letter, number, or character as it is typed, would allow the secretary to proofread and change the information on the screen electronically. Once the message has been edited, approved, and is ready to send, the press of a key would release the message to the communications facility for processing and transmission as an electronic signal to overseas or Headquarters addressees.

When a message arrives in the Operations Directorate (at Headquarters), it would be electronically routed simultaneously to the addressee component's corresponding computer terminal for immediate review on its TV screen and to the central computer for storage in electrical form by the information system. Messages in the information storage system would be easily and quickly retrieved by the same computer terminal and displayed on the TV screen for review. As seen from the description, there would be no paper involved when messages are prepared in electrical form; consequently, the information could be transmitted, stored, and retrieved quicker, more accurately, and without the labor-intensiveness of paper systems with all their attendant faults and storage costs. The necessary safeguards will ensure that records are maintained in accordance with official records procedures of the U.S. Government. While the elimination of paper and the substitution of electronic records-keeping techniques would be a significant departure from current practices, we expect it will be the norm in the future for both the government and private industry.

The realization of these concepts and plans requires certain prerequisites. The size and power of our computers and their peripheral data banks both overseas and at Headquarters must be adequate. The capacity of our communications lines must be improved within Headquarters to handle the electronic traffic. The deployment of typewriter-like computer terminals with TV screens must occur both at Headquarters and overseas. Equally important are the human factors such as training our personnel and developing the technical expertise necessary to plan, create and maintain a complex network of information systems interfaced with the Agency's communications system.

Based on the needs and the technology described above, the Directorate of Operations plans the following specific projects to meet the goal of an up-to-date, cost-effective, and efficient information system:

Headquarters Wide-Band Communications System (BUS)

It will be necessary for the Office of Communications to expand the Headquarters Wide-Band Communications System. This system is the network of communications lines required in Headquarters building to deploy the required typewriter-like computer terminals with TV screens.

Clandestine Records Applications Field Terminal (CRAFT)

CRAFT, via the required interface with the Agency's communications system, will provide overseas installations and Headquarters components with information storage and retrieval systems through which the computer terminals described in the above concept of operations would be used to originate, receive, store, and retrieve messages. Briefly, CRAFT will:

a. take full advantage and build on present systems instead of developing new systems from the beginning;

b. use latest off-the-shelf technology;

c. improve and streamline the flow of intelligence information;

d. selectively provide direct dialog between overseas and Headquarters using the previously described terminals; and

e. allow for almost paperless files.

The first system element will be operational in April 1978 when electronically-transmitted messages captured in electrical form will be available for retrieval by the information system. We call this system COMET. Deployment of the terminals described earlier will begin in 1980.

Directorate of Operations Records and Information Control System (DORIC/W)

DORIC/W is now being developed under contract. The system will be fully implemented in August 1979 as the Directorate of Operations computerized microfilm document storage and retrieval system that will contain (1) some 3.8 million pages of messages converted from the DO's present automated microform storage system known as WALNUT and (2) those documents which cannot be transmitted electrically because of their form or size. Rather than exclude such documents from computerized storage, DORIC/W will microfilm the incoming paper and retrieve the film through a computerized index of film image locations. In the early 1980's the retrieval process will be improved and use scanners to convert the microfilm image into

computer code that will be sent electronically along the BUS communications lines to the same typewriter-like, TV screen computer terminals used by the CRAFT system. Once DORIC/W has the capability to scan the microfilm, older messages in the COMET electronic data bank will be transferred to and stored in DORIC/W. This transfer of information will ensure that CRAFT maintains optimum response efficiency and that DORIC/W is used in the most cost-effective manner.

It is planned that the BUS, COMET, CRAFT and DORIC/W systems will be developed incrementally from 1978 through 1984.

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Remarks:

Mr. Richard Giza, of the HPSCI, requested an explanation of the CRAFT and COMET systems planned by the Operations Directorate.

Would you please provide the attached information to him.

FOLD HERE TO RETURN TO SENDER

FROM: NAME, ADDRESS AND PHONE NO.	DATE
[redacted] 15 Office of the Comptroller	22Mar78

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